Claims

1) A method of producing a microfluidic device comprising (a) providing a body comprising fusible material; and (b) selectively applying energy so that a portion of the fusible material melts, thereby creating one or more microchannels in the body.

2) A microfluidic method comprising (i) producing a microfluidic device by the method of claim 1; and (ii) passing an analyte material into a said microchannel.

3) A method according to claim 2 in which energy is also selectively applied during step (ii) to maintain and/or to alter the microchannel(s).

4) A method according to any preceding claim wherein said body comprises a casing of material that is not fusible is use, and fusible material within said casing.

5) A method according to any preceding claim wherein there are electrodes projecting into the body.

6) A method according to any preceding claim wherein said selective application of energy is effected by the application of a beam of radiation or particles and/or by the application of a voltage.

7) A method according to any preceding claim wherein the fusible material is ice, optionally containing a dissolved electrolyte.

8) A method according to any preceding claim wherein the body contains one or more cavities, optionally produced by said selective application of energy, communicating with one or more of said microchannels to function as reservoirs.

9) A method according to any preceding claim wherein the device is provided with one or more detection windows and/or detection devices.

10) A method according to any preceding claim wherein the device includes means for use in said selective application of energy.